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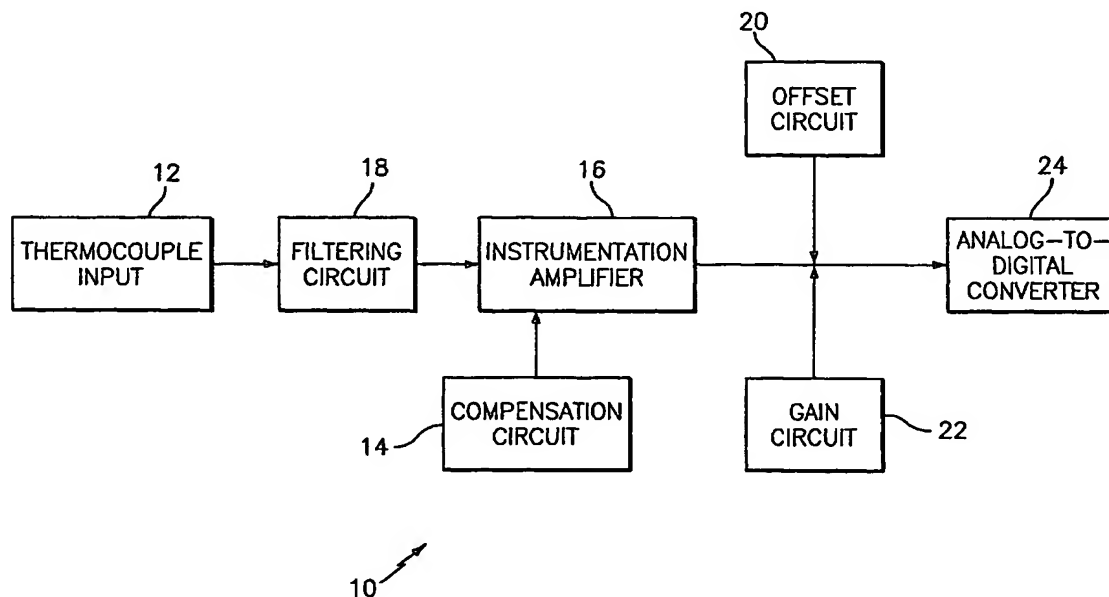
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(54) Title: **THERMOCOUPLE MEASUREMENT CIRCUIT**



(57) Abstract: A thermocouple measuring circuit for sensing a temperature at a measuring point is provided. The thermocouple measurement circuit (12) includes a thermocouple input for sensing a temperature at a measuring point, a compensation circuit (14) for compensating thermocouple effects of junctions of the thermocouple, and an instrumentation amplifier (16) for summing an output of the thermocouple and an output of the compensation circuit and outputting a voltage indicative of the temperature sensed, wherein the output of the compensation circuit is a reference voltage for the output of the instrumentation amplifier. Various embodiments of the thermocouple measurement circuit may be employed in electrosurgical generators for controlling output power dependent on temperature conditions.